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ABSTRACT

This report reviews the history of open education, the philosophy supporting it, and some conclusions drawn from testing children who have been exposed to it. The basic theory of open education is that children learn in different ways at different times from things around them which interest them. Ideally, the teacher acts as a guide and resource person and encourages pupils to proceed at their own pace and develop independence of thought. The goal is to develop in children initiative, creativity, and critical thinking. In comparative testing of open classroom and traditional classroom experiences, the number and complexity of variables involved almost preclude definite conclusions. On the whole, results for open classrooms tend to indicate improvement in cognitive areas. However, little statistically significant difference was found in other test areas. The data appear to indicate that the success of the open school is largely dependent on the individuals in the school who plan, organize and implement curriculum. (JD)

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OPEN EDUCATION:
A REVIEW OF THE LITERATURE

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OPEN EDUCATION: A REVIEW OF THE LITERATURE

by Carol H. Bader and C. Robert Blackmon

The history of the open education concept has roots as far back as the time of Socrates. He encouraged his students to seek answers through their own observations and reasonings, to develop their own intellectual powers, and to aid one another in the process. A similar approach was carried on by men like Comenius and Locke. Inspired by Locke, in Emile Rousseau urged the natural development of the individual child through his own interests and curiosities concerning his natural surroundings.[1] Such a philosophy was promulgated by Pereira, Itard, Pesstalozzi, Herbart, Froebel, Tolstoy, Seguin, and Montessori. Montessori believed that children should follow their interests and desires in their own self development but should be guided along general lines by adult supervision.[2] From a long history of philosophic beliefs the infant school developed in Britain, and the Dewey-inspired progressive movement arose in America. Dewey proposed, "Let the child's nature fulfill its own destiny, revealed to you in whatever of science and art and industry the world now holds as its own."[3] But the timing for open education was not right for America in the 1930's. Not until recent times has this "innovative" philosophy taken hold in the United States and in the works of contemporary writers such as Piaget, Bruner, Holt, Featherstone, Kohl, Dennison, Herndon, and Silberman. In that tradition Silberman advocated the same general principle: "Each stage in the child's development is accompanied by all sorts of new learning based on experience, and what helps the child progress from stage to stage is his own activity."[4]

Definitions

Most persons conjure up two separate ideas when "open" is associated with schools. One of these ideas entails the concept of "open space." As Frank Brunetti says, ". . . an open space school is composed of instructional areas without interior walls ranging in size from two to over thirty equivalent classrooms."[5] George describes this idea of space as lacking interior partitions; visible and acoustical separations between classrooms are limited.[6] The other idea of "open" is the philosophical school of thought already mentioned. According to one of the leading proponents of that school, Lillian Weber, modeling American open schools after British infant schools has called for changes in both the traditional education system and in the physical setting of the schools.[7]

What exactly is this "innovative" methodology and philosophy of education called "open education"? Many authorities believe that the open education concept cannot be defined. Like freedom, once the concept is defined, it loses part of its meaning.[8] As an unidentified friend of Barth's said, "If I have to explain it to you, you'll never understand."[9] Most educators will concede that Piagetian theory (reflecting the Aristotelian principle of "constant change") is one of the prime concepts underlying the open idea of education.[10] In Piagetian theory children learn in different ways at different times from things around them which interest them and from each other. The child learns best when learning is sparked by his own interest. The teacher, then, would be a guide and resource person. Emphasis would be placed on learning rather than on teaching. Activities would be geared to the capacity and emotional needs of children in an attempt to develop the whole individual through a series of happy and busy experiences of learning.[11] As Perrone asserts, learning in the open classroom is

". . . a personal matter that varies for different children, proceeds at many different rates, develops best when children are actively engaged in their own learning, takes place in a variety of settings in and out of school, and gains intensity in an environment where children -- and childhood -- are taken seriously."[12]

Cockburn quotes Donald Musello's definition of open education as "education that maximizes student choice in all dimensions of schooling. It can be considered a multidimensional set of concepts which describe a school or classroom along a concinuum of openness."[13] Nyquist characterizes an open school as being "person-centered, idea-centered, experience-centered, problem-oriented, and interdisciplinary with the community and other institutions."[14]

Rogers and Church describe open education as less content-centered and more person-centered. The curriculum is generated out of where children are and what they bring to the situation. There is no distinction between affective and cognitive development. The correct answer is not as important as good failures and questions. The emphasis is on process, not product.[15]

Kohl finds it hard to say exactly what open education is but believes that one must feel it. While educators can neither come upon a completely scientific definition accepted uniformly nor settle upon a single term for the concept, some of the names ascribed to the movement include "open education,"[16] "informal education,"[17] "open schools,"[18] "open classroom,"[19] and "communities of learning";[20] but called by any name, all open education seems to have a common characteristic -- the development of initiative, creativity, and critical thinking in children. The goal seems to be "happy children who feel successful, confident, and self-disciplined; who are capable of independent thinking and desirous of continuing the learning

process; and who enjoy reading and acquiring the necessary skills in mathematics, science, social studies, and English because such skills are necessary to the solution of the problems with which the children are involved."[21]

Salient Components

Schneiderman has analyzed several open education situations and arrived at nine salient components of the open classroom.[22] First is the child. The curriculum is molded to the child, and he is the pivotal figure around which all activities, materials, and environment are planned. He functions independently and at the same time interdependently with adults in residence. The child is essentially good, and he has experiences that become personally relevant to his cognitive growth. Second is the adult in residence. This person plans, organizes, directs, and assists activities. Every adult the child comes in contact with is important since the child is interacting with all. The third characteristic is environment, and it includes two phases: 1) the physical setting and 2) materials. Well-designed, esthetically-pleasing space around children is conducive to the development of ideas and learning. Fourth is the content or curriculum. The curriculum is a set of intentions that provide opportunities for experiences through which the child can learn. Content is anything that is studied purposefully in the classroom which becomes the basis for discussion and activity. Content and curriculum ideally should flow from the child. If traditional content and curriculum is interesting to a child and meets his personal needs and challenges him to higher cognitive, physical and emotional levels, there is no need to exclude them. What matters is <u>how</u> material is presented and organized and whether or not it serves the needs and interests of children. Curriculum is not necessarily sequential; it

is sequential in that the child does work according to his own ability, level, and pace. The fifth component is organization; although it should be flexible, structure is important. There should be organization of space, time, growth of the child, and instruction. There should be a flow from activity to activity and from individual to group work. The sixth and seventh features are flexibility and structure. The open classroom should never be so loose as to be disorganized and confusing, but it should never be so tight that it is unadaptive to change. Each curriculum area has a structure of its own that dictates the best way it can be pursued. The eighth characteristic is philosophy. The philosophy centers around the ideas of Dewey and Piaget. Each person is a unique individual. This does not mean that anything goes or that one must pursue "far-out" ideas; it does mean that learning progresses in stages. The ninth salient component is support. An open classroom that is successful must have personnel support, financial backing, and all the technology involved in running a progressive structure. It involves many people working together. Without any single one of these ingredients, an open classroom situation is in danger of failure.

Why has the open classroom risen to the fore-ground in recent history? First, in 1967 the Plowden Report enthusiastically supported the infant schools in Britain.[23] Second, there has been much criticism of traditional schools by such writers as Silberman,[24] Kozol,[25] Holt,[26] Herndon,[27] Glasser,[28] and Illich.[29] Third, during the past decade there has been a failure of curriculum reform. Fourth, the American people are placing more importance on the individual in society.

Open v. Traditional Concepts

Is the open concept of education better than the traditional concept? Problems arise when trying to compare open classrooms with traditional

ones, as Goodlad points out:

> Attempts to measure the effects of nongraded schools have been inconclusive. . .To compare a supposedly nongraded school with a graded one is to compare a school which recently has been modified, minimally or substantially, with a school which has had many years to refine its practices. Actually, it is somewhat surprising that nongraded schools have held their own with graded schools in the few reasonably controlled comparisons that have been made, in view of the fact that the criteria of comparison of the procedures used almost invariably are based on the assumptions of grading rather than the assumptions of nongrading.[30]

A nongraded program must be compared and evaluated in terms of the composite theoretical and practical concepts which constitute its underlying philosophy.[31] So far research and testing data on actual success of open classroom situations is pitifully inadequate.[32] The use of standardized measurement only is not valid, and affective as well as cognitive evaluation must be made for total comparisons of each program.[33]

Comparative Studies

Results from comparative studies give interesting insights. Bleier and his colleagues believed open classrooms fostered independence and developed positive self-concepts. They considered these self-concepts as important as results on standardized tests and tested two third-grade classes (comparable as to age, sex, IQ, SES, MAT, and ethnic backgrounds) -- one traditional and one open. They tested to find the amount of self-confidence shown on a non-compliance test on which suggested wrong answers were placed on a questionnaire. They concluded that the significant difference in the mean number of conformity answers favored the open classroom group; traditional classroom children were likely to choose the suggested answer more often than the open classroom children. According to Bleier and his associates, the open classroom pupils trusted their own answers more often, thus showing more confidence.[34]

Remacle reported evaluations for elementary school children based on data from the Iowa Tests of Basic Skills, the School Morale Scale, and the Bill's Index of Adjustment and Values scales. He reported that:

1. the only statistically significant rise on the Iowa Test for the open group was in study skills;
2. the means for the open group were higher in all areas but not significantly so;
3. statistical significance of scores on all seven subscales on the School Morale Scale was shown for open classroom fifth-graders but no significance was shown for sixth graders (perhaps it is easier to change programs for younger rather than older children);
4. means were higher on the Index of Adjustment and Values but that the differences were not significant.[35]

Williams' study focused on five criteria:

1. distribution of teacher instruction time;
2. library usage;
3. use of materials and resources;
4. individualizing instruction; and
5. grouping practices.

Williams found that although the type of organizational structure per se can affect instructional practices, the structure is not an automatic indicator of the nature of the school program. Williams suggested that future research is needed in instructional strategies, resources, and goals. He claimed that research on organization per se seemed unprofitable.[36]

Pavan cited the 1968 Vogel and Bowers[37] study of 702 subjects in the open classrooms and traditional classrooms for one year. On the Stanford Achievement Test open classroom students scored significantly lower than control groups. However, the higher scores on the Draw-A-Person Test and the Russell Sage Social Relations Test were significant.[38] Of the studies reviewed for this report, the authors found that Pavan's was the only one which reported significantly lower results on standardized tests. The study, however, was carried through for one year only; perhaps standardized scores would have improved with continuation of the program.

Eells' study in 1970 of 1368 children showed a significant difference favoring open classroom children on the Iowa Tests of Basic Skills. Again, the researcher reporting claimed that the longer each pupil was in the open program, the higher he achieved in relation to his ability.[39]

McLoughlin's comparative study of open and traditional classrooms reported no significant differences on the Metropolitan Achievement Test or the Pupil Portraits. However, there were fewer pupil retentions in the open class situations than in the traditional class situations.[40]

Junell found a significant difference favoring open classrooms when he tested 150 male underachievers with Bills' Index of Adjustment and Values, Borg's Utah State University School Inventory, and the California Test of Personality.[41]

Ward performed comparative studies that produced results similar to the studies previous to his. His 797 primary children produced significantly positive results favoring the open classrooms, but the intermediate students showed no statistical improvement. On the Draw-A-Man test for school anxiety the open classroom children received significant results favoring the traditional classroom children.[42]

In Case's study of 267 blacks the results were significantly in favor of the open classroom children. For a change, however, these children showed no significant differences on the Ohio Social Acceptance Scale or the Gordon's How I See Myself test.[43]

Purkey observed 939 Florida children in the two types of classrooms. The significantly different results favored the open classroom children who took the Coopersmith Self-Esteem Inventory. No standardized achievement test was given.[44]

Wilt compared the scores on the Iowa Test of Basic Skills and on the Michigan Student Questionnaire made by male students in two different

schools in Missouri. On both tests the differences between the traditional group and the open group were not significant.[45]

Bowman surveyed two schools in North Carolina over a two-year period. His survey of an open school and a traditional school produced results opposite to Ward's. The North Carolina students showed a statistically significant difference on the Metropolitan Achievement Test at the intermediate level; and the primary level showed no difference. Neither of Bowman's open school groups showed a statistically significant difference in results from the traditional classroom students when given the Piers-Harris Children's Self-Concept Scale.[46]

Warner studied 120 pupils in the two sets of classrooms. On an achievement test, the Flander's Verbal Interaction Analysis Scale, and the Halpin Organizational Climate Description Questionnaire he found no statistical difference between the control group and the experimental group. He did find, however, that the students in the open situation performed statistically higher in the areas of small-group instruction and use of supplementary materials.[47]

Doob conducted a summary of research on open education for Educational Research Service and came up with the findings presented in Table 1 by the authors of this paper.[48]

Table 1

SUMMARY OF RESEARCH ON OPEN EDUCATION

	for open ed.	for traditional	no stat'l difference
Student Achievement			
Elementary	2		1
Secondary	1		3
Student Self Concept	2		1
Student Behavior	2	1	
Student Attitude	4	1	
Transfer (from elem. school to h.s.)	1		
Teacher Morale			
Elementary		1	
Junior High			1
High School	1		
Parent Reaction	3		
Community and Police Reaction	1		

Data for this table were taken from Heather S. Doob, Summary of Research on Open Education: An ERS Research Brief. Washington, D.C.: Educational Research Service, 1975.

Conclusions

From these studies one can conclude that no single organizational change can meet all of the individual needs of learners. When comparing open classroom and traditional classroom experiences, the number and complexity of the variables involved almost precludes definite conclusions.[49] However, on the whole, results for open classrooms tend to indicate statistically significant improvement in the cognitive areas; rarely was there a significant decrease in the cognitive areas when observing the open classroom.

According to Anderson, when an open classroom fails, the failure is due to inadequate preplanning, non-support, and misunderstandings of the philosophies and concepts. Personnel of open school systems need intensive preparatory summer workshops. Advisors are needed to work closely

with the teachers, and each summer needs to be a time of evaluation and further development of the work begun. A big emphasis, of necessity, must be placed on skillful, clinically-oriented, and systematic supervision.[50] The literature seems to support Barth's view of the developmental stages of open education: testimonial, analysis, and proliferation. He projects a potential fourth stage of self-criticism and self-correction also as one concerned with "diffusion and demythologizing of the valuable ideas, methods, and beliefs of open education and their selective assimilation by teachers into their important classroom work."[51] The data appear to indicate that the success of the open school is largely dependent on the individuals in the school rather than on any external factors.

The literature indicates a plentitude of proponents of open education and a paucity of rigorous research on the subject. Perhaps one of the most significant contributions of the open education movement will be its press for more research.

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